

IN THE CLAIMS:

Amend claims 1-7 as follows:

1.(Currently Amended) Method for immobilizing molecules on surfaces of a support in which electrical sensors and processor circuits are integrated, said method comprising the following process steps:

- applying ~~ication~~ of a layer of a hydrophobic polymer to the surface; and
- immobilizing ~~ation~~ of molecules on a surface of the layer.

2.(Currently Amended) The Mmethod of claim according to Claim 1, wherein ~~characterized in that~~ the polymer is a polyimide and/or polystyrene.

3.(Currently Amended) The Mmethod of claim 1, wherein according to Claim 1 or 2, ~~characterized in that~~ the polymer layer is applied to the surface only in previously defined regions.

4.(Currently Amended) The Mmethod of claim 1, wherein according to one of the ~~foregoing claims, characterized in that~~ a positive or negative electric charge is imparted to the surface of the polymer layer, at least in sectional fashion, by plasma treatment.

5.(Currently Amended) The Mmethod of claim 1, wherein according to one of the ~~foregoing claims, characterized in that~~ UV-reactive molecules are covalently immobilized by irradiation with UV light.

6.(Currently Amended) The Mmethod of claim 2, wherein according to one of the ~~foregoing claims, characterized in that~~ the polymer layer is activated, at least in sectional fashion, in an oxygen plasma.

7.(Currently Amended)     The Mmethod of claim 1, wherein according to one of the  
foregoing claims, characterized in that a portion of the surface of the polymer layer is  
utilized for application with an integrated circuit (IC) or a microsystem.